AMENDMENTS TO THE CLAIMS

Claims 1-15 (Canceled)

Claim 16 (Currently Amended) A recording and reproduction apparatus that records and reproduces information by directing a laser beam at ~~the~~ an optical recording medium ~~according to Claim 12~~ having (i) spiral or concentric circular grooves for tracking a laser beam, (ii) an information recording layer, (iii) an identification region, and (iv) an information recording region, wherein a track pitch Tp2 of the circular grooves that are formed in the identification region is larger than a track pitch Tp1 of the circular grooves that are formed in the information recording region, and wherein a width of the circular grooves formed in the identification region is less than a width between the circular grooves, the recording and reproduction apparatus comprising:

an irradiation unit for directing the laser beam at the optical recording medium;

a light receiving unit for receiving the laser beam reflected by the information recording layer, the reflected laser beam being received by ~~means of~~ a photodetector that is split into ~~at least~~ two parts by a split line parallel to ~~the~~ a direction of the circular grooves; ~~and~~

a control unit for determining whether the circular grooves on ~~the~~ a side of the optical recording medium where the laser beam is incident are convex or concave based on ~~the basis of~~ a sum signal and a difference signal of ~~the~~ photodetection signals outputted from the ~~split~~ photodetector, and for subjecting the circular grooves to tracking control based on ~~the basis of~~ a result of the determination of whether the circular grooves are convex or concave ~~result~~; and

an objective lens arranged to make a spot diameter of the laser beam directed by the irradiation unit larger than the width of the circular grooves formed in the identification region and less than the width between the circular grooves formed in the identification region.

Claim 17 (Cancelled)

Claim 18 (Currently Amended) A method for recording and reproducing ~~in which~~ information ~~is recorded or reproduced~~ by directing a laser beam at ~~the~~ an optical recording medium ~~according to Claim 12~~ having (i) spiral or concentric circular grooves for tracking a laser beam, (ii) an information recording layer, (iii) an identification region, and (iv) an information recording region, wherein a track pitch Tp2 of the circular grooves that are formed in the identification region is larger than a track pitch Tp1 of the circular grooves that are formed in the information recording region, and wherein a width of the circular grooves formed in the identification region is less than a width between the circular grooves, the ~~recording and reproduction~~ method comprising ~~the steps of~~:

directing the laser beam at the circular grooves formed in ~~an~~ the identification region of the optical recording medium, such that a spot diameter of the laser beam directed at the circular grooves formed in the identification region is larger than the width of the circular grooves formed in the identification region and is less than the width between the circular grooves formed in the identification region;

directing the laser beam at the circular grooves formed in ~~an~~ the information recording region of the optical recording medium;

controlling ~~the~~ a focal point of the laser beam to focus on the information recording layer;

receiving the laser beam reflected by the information recording layer with a photodetector that is split into ~~at least~~ two parts by a split line parallel to ~~the~~ a direction of the circular grooves;

determining whether the circular grooves on ~~the~~ a side of the optical recording medium where the laser beam is incident are convex or concave based on ~~the basis of~~ a sum signal and a difference signal of ~~the~~ photodetection signals outputted from the ~~split~~ photodetector; and

subjecting the circular grooves to tracking control based on ~~the basis of the~~ a result of the determining of whether the circular grooves are convex or concave ~~determination step~~.

Claim 19 (Currently Amended) The method for recording and reproducing information ~~with an optical recording medium~~ according to Claim 18, wherein the spot diameter of the laser beam that is directed at the information recording layer is ~~set~~ larger than the width of the circular grooves formed in the identification region.

Claim 20 (Currently Amended) The method for recording and reproducing information ~~with an optical recording medium~~ according to Claim 18, wherein the optical recording medium includes a plurality of the information recording layers and wherein the ~~step of~~ controlling of the focal point of the laser beam is performed on ~~at least~~ one information recording layer of the plurality of information recording layers.

Claim 21 (Currently Amended) The method for recording and reproducing information ~~with an optical recording medium~~ according to Claim 20, further comprising ~~a step of~~ determining whether the circular grooves of ~~the~~ an information recording layer of the plurality of information recording layers that is not subjected to the ~~step of~~ controlling of the focal point of the laser beam

are convex or concave based on ~~the basis of~~ recording track information stored in a control information region of the optical recording medium.

Claim 22 (Currently Amended) The method for recording and reproducing information ~~with an optical recording medium~~ according to Claim 18, wherein ~~the recording or reproduction of information is performed using an optical recording medium in which~~ information signals have not been recorded in the circular grooves formed in the identification region of the optical recording medium.